

## **Claims**

We claim:

1. A safety and force saving lighter, comprising casing(17), gas valve  
5 assembly(3) on top of casing, piezoelectric assembly(15) at one side of gas valve  
assembly and press trigger (13) on top of piezoelectric assembly, a crow plate(14)  
causing both to act coordinately is set between the said gas valve assembly and  
piezoelectric assembly, characterized in that a strengthener(12) is provided  
10 between piezoelectric assembly(15) and press trigger(13); A slot with a push  
key(10) is set on the press trigger(13) , there is a reset spring (11) between push  
key(10) and side wall of press trigger, a lobe(20) is located at the bottom of push  
key(10) which has a position corresponding to the top of strengthener(12).

2. A safety and force saving lighter according to Claim 1, characterized in  
that the top of strengthener (12) is propping with press trigger, the bottom spindle  
15 is installed on the casing with a concave bayonet on the middle and the bayonet  
being seized onto the piezoelectric assembly(15).

3. A safety and force saving lighter according to Claim 1, characterized in  
that the push key(10) is installed transversely onto the two ends of press trigger  
and able to translate front and back along the slot of press trigger.

20 4. A safety and force saving lighter according to Claim 1, characterized in  
that there is a guide rib (19) on the inner wall of press trigger and the strengthener  
(12) presents a circular top surface which is able to move with this guide rib  
coordinately.

5. A safety and force saving lighter according to Claim 1, characterized in  
25 that a stop block (21) is fixed onto one side of the lobe(20) .

6. A safety and force saving lighter according to Claim 2, characterized in  
that the push key(10) is installed transversely onto the two ends of press trigger  
and able to translate front and back along the slot of press trigger.

7. A safety and force saving lighter according to Claim 2, characterized in that there is a guide rib (19) on the inner wall of press trigger and the strengthener (12) presents a circular top surface which is able to move with this guide rib coordinately.

5        8. A safety and force saving lighter according to Claim 2, characterized in that a stop block (21) is fixed onto one side of the lobe(20) .